

Proposed Change to Groundwater Cleanup for the Teledyne MEC Site



Explanation of Significant Differences Available for Public Review

DTSC is one of six Boards and Departments within the California Environmental Protection Agency. The Department's mission is to restore, protect and enhance the environment, to ensure public health, environmental quality and economic vitality, by regulating hazardous waste, conducting and overseeing cleanups, and developing and promoting pollution prevention.

State of California



California
Environmental
Protection Agency



Additional measures are being proposed to cleanup **trichloroethylene (TCE)** in groundwater at the Teledyne MEC site (Site), located within the Stanford Research Park at 3165 Porter Drive, Palo Alto, California.

DTSC is seeking public comment on a document called, **Explanation of Significant Differences (ESD)**. This document describes the change to the approved 1993 Remedial Action Plan (cleanup plan). The ESD proposes to add **potassium permanganate (KMNO₄)**, a chemical used in wastewater treatment, to the groundwater to eliminate the TCE.

The Draft ESD and the **Notice of Exemption** are available for public review at the locations below:

USGS Library
345 Middlefield Road
Menlo Park, CA 94025
(650) 329-5027

Hours: M–F 8:30 am – 4:30 pm

DTSC File Room
700 Heinz Avenue, Suite 200
Berkeley, CA 94710
(510) 540-3800
Hours: 8:00 am – 5:00 pm
(Please call for an Appointment)

PUBLIC COMMENT PERIOD **February 16, 2005 to March 21, 2005**

The public is invited to review and comment on the Draft Removal Action Workplan (RAW) and the **California Environmental Quality Act, Notice of Exemption** for the Site. All comments must be postmarked by 5:00 P.M. on Monday, March 21, 2005. E-mailed comments must be sent to DTSC no later than 5:00 P.M. on the same day. Please send comments to:

Janet Naito, DTSC Project Manager
700 Heinz Avenue, Berkeley, California, 94710
jnaito@dtsc.ca.gov or call (510) 540-3833.

For more information, please contact Nancy Cook, DTSC Public Participation Specialist, (510) 540-3923 or e-mail ncook@dtsc.ca.gov. A public meeting will be considered if one is requested. Please submit a written request for a public meeting, including the issues to be raised, to Nancy Cook at the address above by the end of the public comment period.

For more information about DTSC, visit www.dtsc.ca.gov

SITE HISTORY

The Site was used from 1963 until 1992 to manufacture microwave tubes. These activities involved the use of TCE. Soil and groundwater investigations conducted from 1987 through 1991 found TCE in the soil and groundwater beneath the Site.

SITE CLEANUP

DTSC approved a cleanup plan, called a Remedial Action Plan or RAP, for the Site in 1993. The cleanup began in late 1993. The cleanup plan called for:

- Excavation and offsite disposal to remove soil containing TCE above site cleanup goals.
- Groundwater pumping and treatment.

In 1993, approximately 450 cubic yards of soil was excavated and disposed of offsite to achieve the site cleanup goals. Presently, the extracted groundwater is being treated at the adjacent Hewlett-Packard Building 15 Site treatment system. The groundwater pumping system has operated since January 1994 and continues to remove TCE from the groundwater. Drinking water for this area is provided by the local water district. Groundwater below this site is not used for drinking water.

CHANGES TO THE CLEAN UP

Recent studies at the adjacent Hewlett-Packard Building 15 Site show that TCE in groundwater can be destroyed in the ground using a substance called **potassium permanganate (KMNO₄)**. This is a chemical that is often used for wastewater treatment.

Teledyne MEC proposes to inject KMNO₄ solution into shallow groundwater in areas of the Site where the highest TCE concentrations remain. Groundwater pumping will be stopped in the treatment area. Pumping wells located outside the treatment area will continue to operate and groundwater removed from these areas will continue to be treated aboveground.

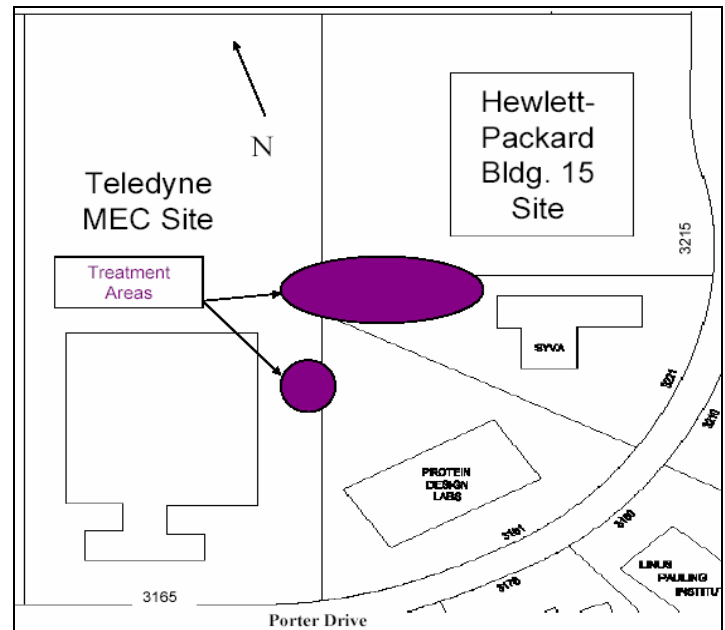


Figure 2 - Site Layout

Groundwater monitoring will be conducted to monitor the distribution, persistence and effectiveness of the KMNO₄ solution. TCE levels in the treatment area should decrease to non-detectable levels following the injection of the KMNO₄ solution. As the KMNO₄ solution is used up, TCE levels in groundwater may increase, but should be at much lower levels than those initially detected. It may take from one to three years for the KMNO₄ to be completely depleted. If TCE levels in groundwater are still above the site cleanup goals after the KMNO₄ is used up, then an additional injection event may be conducted or the extraction wells within the treatment zone will be restarted.

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

As required by CEQA, DTSC has evaluated the project for potential environmental impacts. The proposed change to the groundwater cleanup action will not have significant adverse impacts on the environment. DTSC has prepared a Notice of Exemption that is available for public review and comment at information repositories listed on the page 1 of this fact sheet.

GLOSSARY

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) - A California law requiring an environmental impact review of governmental actions. The Act applies to state and local agency activities, and to private sector activities financed, regulated, or approved by state and local agencies.

DEPARTMENT OF TOXIC SUBSTANCES CONTROL (DTSC) – A department of the California Environmental Protection Agency that is responsible for overseeing investigation and cleanup of hazardous waste sites. DTSC was formerly the California Department of Health Services, Toxic Substances Control.

EXPLANATION OF SIGNIFICANT DIFFERENCES (ESD) – A document approved by DTSC that outlines changes to the cleanup plan established by the Remedial Action Plan.

NOTICE OF EXEMPTION – A California Environmental Quality Act document issued by the lead regulatory agency when the proposed project will not have a significant effect on the environment.

POTASSIUM PERMANGANATE (KMNO₄) - A chemical frequently used for water treatment purposes, which is capable of breaking down contaminants such as volatile organic compounds (VOCs) into nontoxic compounds.

PUMPING AND TREATMENT – Groundwater is removed from beneath the ground surface and treated to remove the contaminants before being discharged. At the Building 15 Site, treated groundwater is placed into Matadero Creek.

REMEDIAL ACTION PLAN - A plan approved by DTSC that evaluates various cleanup alternatives and then recommends one of these to address contamination at the Site.

TRICHLOROETHYLENE (TCE) - An organic chemical that can readily change into the vapor form at room temperature. This chemical was commonly use as a degreaser in manufacturing processes.

ANUNCIO

Si prefiere hablar con alguien en español acerca de ésta información, favor de llamar a Jacinto Soto, Departamento de Control de Sustancias Tóxicas. El número de teléfono es (510) 540-3842.

FOR MORE INFORMATION

If you would like more information about the Site, please call:

Janet Naito
DTSC Project Manager
(510) 540-3833 or
jnaito@dtsc.ca.gov

Nancy Cook
DTSC Public Participation Specialist
(510) 540-3923 or
ncook@dtsc.ca.gov

For media questions, contact:
Angela Blanchette
DTSC Public Information Officer
(510) 540-3732 or
ablanche@dtsc.ca.gov

For information on accessibility and to request reasonable accommodations, please contact Nancy Cook at (510) 540-3923.

NOTICE TO HEARING IMPAIRED INDIVIDUALS

TDD users can obtain additional information about the Site by using the California State Relay Service (1-888-877-5378) to reach Nancy Cook at (510) 540-3923.

COMMENT FORM

Let us know your comments about the **ESD for the Teledyne MEC Site**. Please fill out and mail by March 21, 2005.

Name (optional) _____ Organization (optional) _____

Address _____ City _____ State _____ Zip _____

Phone _____ (optional) Fax _____ (optional) E-mail _____ (optional)

Comments (*attach additional pages if needed*) _____

Please Note - Your comments will be considered public records and may be subject to release if requested.